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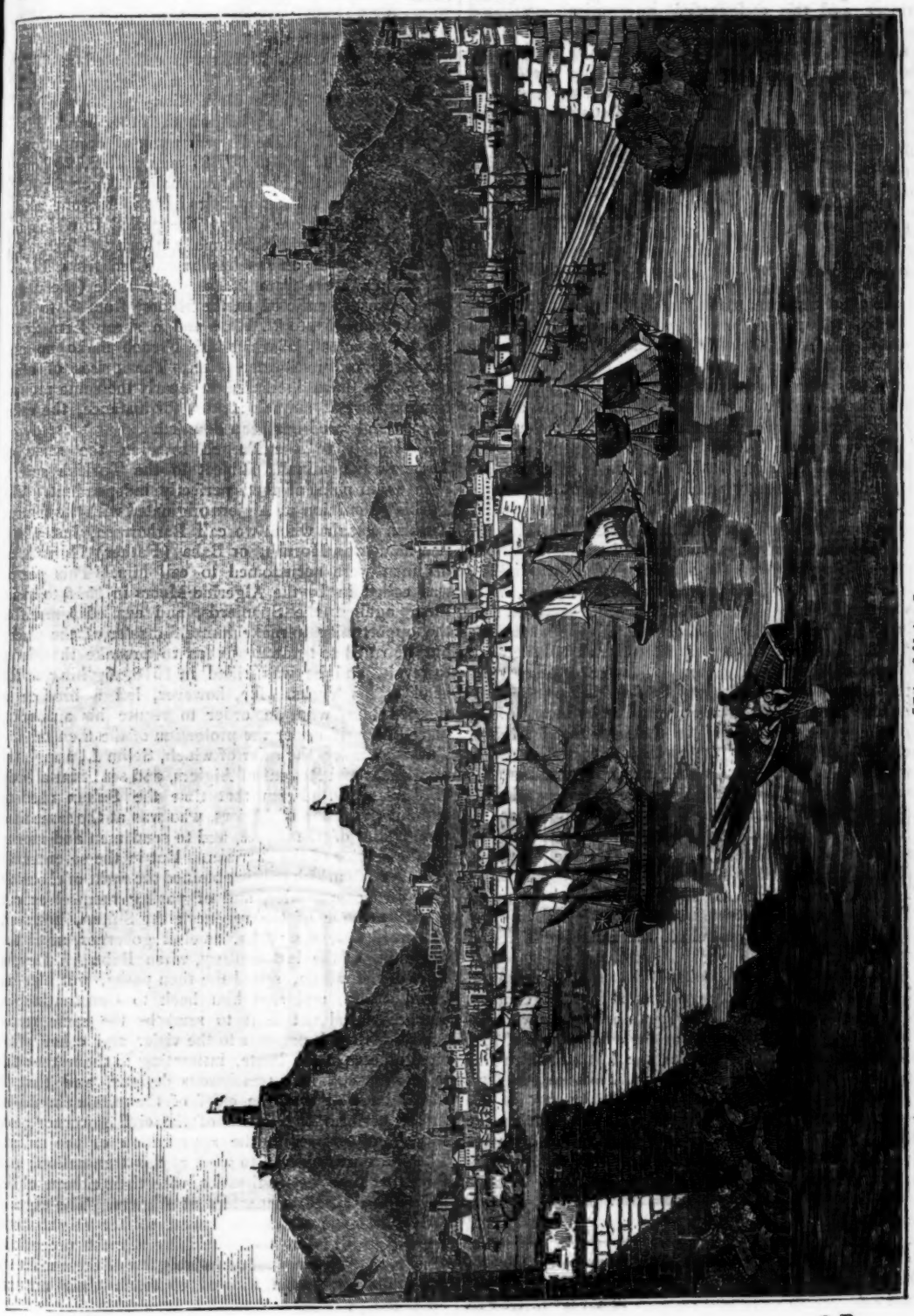
ALGIERS.



[City of Algiers.]

THIS remarkable city is situated in 36° 49′ north latitude, 3° 25′ east longitude, on the southern shore of the Mediterranean Sea, the waves of which wash its walls. It is built in the form of an irregular triangle, the base of which is formed by the sea-coast. The streets of the town are remarkably narrow, filthy, and uneven; very few of them cross others at right angles, and very few are straight. The principal street extends from east to west, traversing the town in its greatest breadth: its length is 1200 paces, and its breadth twelve. It contains the best shops, the houses of the principal merchants, and the market for corn and all provisions: in all the other streets it is rarely that two persons can pass abreast. The inconvenient construction of the streets manifests not only the bad taste of the inhabitants, but indicates the absence of those numerous and complicated relations which are found in modern European towns, as well as the want of vehicles of burthen or convenience. Similar causes produced towns of a similarly bad construction in Europe in the middle ages. The houses, as in most other Moslem towns, are square, enclosing an open court in the middle, into which, and not into the street, all the windows open. Previously to the French expedition of 1830, an order of the Dey was in force which directed that every householder should whitewash the walls of his house once every year; this practice gave to the city, as viewed from a distance, an appearance which a French writer compares to that of an immense piece of linen extended in the sun: the glare of these white walls was very distressing to the eyes. The roofs, as in most southern and oriental towns, are flat, and in the evening the families resort to them to enjoy the sea-breeze. Formed into terraces, they often support gardens with pavilions, or closets, to which the master of the house withdraws at the hour of the *siesta;* and, reclining upon a sofa, amuses himself by smoking the tobacco of the Levant, or by chewing opium, while his attention seems directed to the sea, the softened roar of whose waves lulls him to slumber. As the houses are contiguous, a person may walk from one end of the town to the other along the terraces; but it is, nevertheless, very rare that any one complains of having his house robbed. House robbery does not indeed often occur in any of the Mohammedan towns; and, in the instance of Algiers, there was, previously to the French conquest, a severe law which punished with death any one found in the house of another without being able to assign a legitimate motive for his presence. Some few houses are of a very superior description, being paved with marble, and lined with wainscot, carved with some elegance, and gilt or painted in the best style of Moslem taste. There are some handsome buildings without the town, and a great number of tombs, some of which are furnished with oratories, to which the inhabitants resort every Friday.

The town of Algiers contained thirteen large mosques, with minarets, and about seventy small ones, or chapels, as we should call them, belonging to private individuals. There were also a synagogue for the Jews, and a chapel and hospital for the Christians, the last of which was supported at the expense of the Spanish government. The palace of the Deys was in the lower part of the town; but the late Dey had his residence within the citadel, at the highest point of the city. The town derives from the country a tolerable supply of water, which is brought to it by an aqueduct, and then distributed by conduits to the different parts of the city. Algiers contains the usual proportion of baths and coffee-houses, but there are none that appear to claim particular notice. The batteries which defend the town towards the sea are considered very strong, but those on the land side are so weak and exposed that they offered no very serious obstacle to the progress of the French, who approached the place in that direction. The mole constructed by Barbarossa's brother, Khair-ed-din, is built on a small island that faces the town, in the form of a semicircle, with a large opening into the haven, which is 150 fathoms long and 80 broad; and in which the largest vessels may ride in safety. The mole is defended by a castle, which stands upon the solid rock, and which also serves as a light-house. It has three batteries of cannon. At the south end of the island there is another fort, consisting of three batteries to defend the entrance of the harbour.

The population of Algiers was estimated at 70,000 before its subjection to the French, since which it has undergone considerable diminution—perhaps of one-fourth—by emigration; but, on the other hand, it is to be remembered that the French army of occupation in the territory amounts to 24,862 men, with 2,775 horses. It appears from the French 'Annuaire d'Alger for 1833, that the prices of commodities have undergone a very considerable increase during the period in which the town has been under French authority. Thus, the average price of an ass has augmented from 12*s.* to 2*l.* 10*s.*; a horse from 2*l.* to 8*l.*; a mule (the use of horses was interdicted to the Moors) from 6*l.* to 14*l.*; an ox from 15*s.* to 2*l.* 10*s.*; and a sheep from 2*s.* to 10*s.*: the camel, of which the French make no use, has preserved its former price. The prices of other necessaries have increased in nearly the same proportion as those of animals: thus, for instance, the value of corn and wood has been doubled.

Previously to the French invasion the state of Algiers was nominally subject to the Turkish sultan, but was, in point of fact, perfectly independent. The Turkish dominion at Algiers originated with the famous Turkish corsair whom we call Barbarossa, but whose real name was Horush, or Baba (Father) Horush, as his men were accustomed to call him. This person was called in by the Algerine Moors in 1516 to assist them against the Spaniards, and availed himself of the opportunity to make himself master of the place; but he ruled so tyrannically as to provoke the Moors to revolt, and he was killed in 1518, fighting at the head of his Turks. He, however, left a brother to succeed him, who, in order to secure his authority, placed himself under the protection of the then mighty Turkish empire, the ruler of which, Selim I., appointed him Pasha and Regent of Algiers, and sent him a body of Janissaries. From that time the Sultan used to appoint the pasha of Algiers, who was at the same time commander of the forces, and to send men and money for the service of the garrison. But in the seventeenth century the Turkish militia obtained the right of choosing their own commander, and of paying themselves out of the revenue of the regency: the Sultan, however, continued to send a pasha, as civil governor, until the beginning of the last century, when Baba Ali Dey, a chief of the militia, seized the then pasha, put him on board a ship, and sent him back to Constantinople. The rebel did not omit to send by the same vessel envoys with rich presents to the vizier and other principal officers of the Porte, intimating to them that the rejected pasha had treacherous designs, and that it would be well that the chief of the militia should in future perform the duties of the civil governor also, subject, of course, to the approbation of the sultan. The Porte was obliged to wink at this transaction; and from that time the Janissaries, with their chosen chief, have been absolute masters at Algiers. The dignity of Dey was one which the lowest soldier might hope one day to fill; but it was held by a most precarious tenure, as the lives of comparatively few of these military governors have been allowed to reach their natural termination.

The piratical character of the state appears to have

been derived from Barbarossa, who left his ships to his brother. From that time down to a very recent period the piratical pursuits of the Algerines, with their concomitant barbarities, constituted a nuisance which it is marvellous that the powerful maritime states of Europe should so long have tolerated. It is true that attempts have been made at different times to put an end to it; and some of the more important of such attempts require to be noticed.

The first was made by Charles V. in 1541, at the urgent entreaty of Pope Paul III., who was greatly alarmed at the increasing power and audacity of the Algerine pirates, who did not respect even the patrimony of St. Peter. The emperor, whose own Spanish territories on the Mediterranean were daily exposed to insult and injury, and who was not without the hope of adding one more to his many crowns, readily undertook to put down the nuisance, having first taken the precaution of obtaining a promise of co-operation from several Arab chiefs. The fleet destined to this service left Carthagena on the 15th of October, in the above year; but its formidable appearance did not intimidate the pirates, who, being assisted by a terrible tempest, obtained an easy victory over the imperial fleet. Thenceforth the Algerine corsairs deemed themselves invincible, and their insolence and rapacity increased in proportion. The states of Europe seem to have entertained nearly the same opinion of them; for we soon after find nearly all of them, with the exception of England, forming alliances with the Algerines, and agreeing to purchase exemption from the attacks of the corsairs by certain periodical payments which the Algerines themselves called "tribute"—and not without reason. These tributes continued, in most instances, to be paid down to the year 1830.

The next great expedition against Algiers took place in 1681, when Louis XIV., indignant at the outrages, in violation of existing treaties, of which the Algerines were almost daily guilty, sent the Admiral Duquesne against them with twelve ships of war, fifteen galleys, three fire-ships, and several small vessels. Five bomb-vessels, under the orders of the celebrated Renau, who originally devised the means of rendering bomb-mortars available in vessels, completed this formidable armament. Algiers was then, for the first time, bombarded with such vigour that the Dey yielded, and one of his ministers went in his name to the court of Versailles to ask pardon for the infractions of treaties of which his master had been guilty, and to promise better conduct in time to come. But three years had not elapsed before they recommenced their insults upon the French flag, and were punished anew by Marshal d'Estrées, who bombarded their capital and reduced it to ashes, but not until all the French in the city had been murdered, and their consul had been fastened alive to the mouth of a cannon and shot against the bombarding fleet. This affair, which ended in the most abject submission, obliged the Algerines to be somewhat more attentive to the obligations of treaties, and more careful how they incurred the displeasure of the greater powers.

From this period until the French expedition of 1830, the only expedition of importance against Algiers was that of Lord Exmouth in 1816. As soon as the termination of the continental war allowed leisure to attend to this object, a squadron was sent to Algiers under the orders of that admiral, who was instructed to require that all the Christian slaves in the Algerine dominions should be given up on the payment of a stipulated ransom, and that the system of Christian slavery should in future be entirely relinquished. The Algerine government, under the awe which the immediate presence of the English fleet inspired, was all submission, and concluded a treaty on the above terms. But the fleet was scarcely departed when these terms were violated in the most shocking manner by the massacre of a large body of Neapolitan fishermen at Bona. This intelligence reached England almost at the same time that the treaty was brought home by Lord Exmouth, who speedily set sail again with augmented force to avenge this violation of the law of nations. The Dey, who was sensible of what might be expected, made every preparation for defence. His strengthened bulwarks, however, availed him little against the force and resolution of a British squadron. On the 27th of August, after a most desperate conflict, the Algerine fleet was reduced to ashes,—the powerful batteries which defended the harbour were destroyed, and Omar, the Dey, had no alternative but to submit to the humiliating conditions imposed by the English admiral, which were,—the restoration of all his present captives without ransom,—with the repayment of ransoms formerly received, and the abolition for ever of Christian slavery in his dominions. The Algerines still, however, retained the right, as an independent power, of declaring war with any state they chose, and of seizing its merchant vessels, and imprisoning the crews until peace should be concluded. The proximate cause of the French expedition against Algiers in 1830 was an insult offered by the Dey to the consul Deval in the year 1827. The expedition was preceded by a blockade of two years which cost France nearly a million sterling. The expedition which ultimately proceeded with the intention of taking possession of Algiers, commenced its operations against the town on the land side in June 1830; and, on the 4th of July, they acquired possession of the "Emperor's Fort," which commands the city. On the following day the town surrendered to General Bourmont, on the conditions that persons, private property, and the religion of the country should be respected; and that the Dey and his Turkish militia should be at liberty to quit Algiers, carrying with them their personal property. The French then took possession of the town, the castles, and every kind of public property, among which were twelve ships of war, 1500 bronze cannon, and about two millions sterling in gold and silver. The last of the Deys withdrew to Europe; and Algiers, with some neighbouring towns, remains in the possession of the French, whose government does not appear to have any intention of relinquishing the footing thus acquired on the southern shores of the Mediterranean.

As the chief wealth of the Algerine state proceeded from the plunder of Christian vessels, and the sale, ransom, or profitable labour of their enslaved crews, the Dey must really have had great difficulty in carrying into effect treaties which contracted the limits of depredation, and diminished as well the revenues of the government as the profits of powerful individuals. Hence such treaties excited great discontents among the young and adventurous corsairs, diminished the popularity of the Dey, and not seldom endangered his life. The corsairs formed a sort of republic among themselves, of which the *reis*, or chief captain, was the head, and the inferior officers formed a sort of council under him. They sometimes combined the pursuits of piracy and commerce. When a prize was brought in, it was customary for the prisoners to be paraded before the Dey, who had the first choice of a certain number for his own use. The number which should fall to his share was limited by custom, but it was not unusual for him to indulge in the liberty of exceeding his fair proportion. Of the Dey's captives, some were employed in the service of the palace, and others were sent to the public works: the last had to endure great hardships. They were compelled, with a little aid from machinery, to drag enormous stones from the quarries, while Turks

attended with whips to urge on those whose labours appeared on any occasion to slacken. Their daily food consisted of two small loaves of very bad bread, and a certain quantity of oil; and at night they were locked up in large buildings, destitute of light, and without any beds on which they might lie down. The fate of those who became the slaves of private individuals varied with the dispositions of the masters; but, with some exceptions, it was much less severe than that of the public slaves, whose condition we have just mentioned.

In the preparation of this article some assistance has been afforded by the article 'Algiers' in the 'Penny Cyclopædia.'

Anecdote of Rats.—A correspondent transmits us the following curious anecdote, furnishing another instance of the occasional confidence of animals in others which they are supposed to regard generally as their natural enemies. It would have been interesting to have known by what process the strange familiarity it describes was acquired. "Some years since, I lived in the village of Ickleton, in Cambridgeshire. After my shooting excursions, the dogs were fed in their kennels, the food being placed in a long trough. To this duty I generally attended myself. Upon one occasion, after feeding the dogs, I looked into the kennel through a hole in the door, and was somewhat astonished, not at perceiving a number of rats there, but to see them in the trough, quietly and fearlessly partaking of bread and milk with the dogs, who seemed to pay no attention to such 'small deer.' I doomed the rats to destruction; and the next day placed the trough in such a position, that a gun pointed through the hole would rake it from one end to the other. At the usual hour the food was placed as a lure, —but the dogs were kept out—in vain. I could perceive the head of a sagacious old rat, peering out at more than one hole, and from under the manger, for the purpose of reconnoitring: but none descended. Having waited half an hour to no purpose, I let in the dogs, and in a few minutes they were again feeding cheek by jowl. Had I not ascertained this, I might have supposed that altering the position of the trough, or some other trifling disarrangement of the economy of the kennel, had aroused the suspicions of the little creatures. They seemed, however, to be aware that their safety was connected with the presence of the dogs."

HISTORY OF GAS.—No. V.

[Concluded from No. 170.]

OIL-GAS.

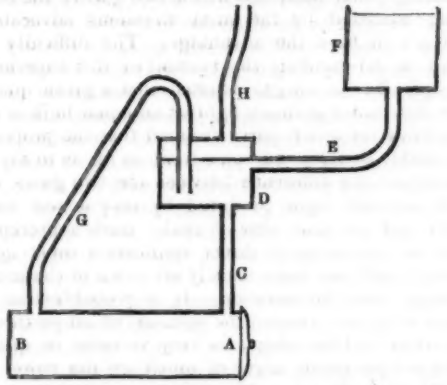
As early as the year 1805, Dr. Henry, to whose experiments on gas we owe many of the processes now in use, published the result of his experiments on the destructive distillation of oil; from which he stated a gas might be procured which would afford a better light than any other material he had employed. Notwithstanding this paper, and another to the same effect published in 1808, no attention appeared to be paid to the subject for many years, and coal-gas engrossed all the attention of manufacturers. But when gas-making became a profitable business, other processes were investigated by which a share in the advantages might be obtained, the writings of Dr. Henry were naturally adverted to, and oil was experimented on. The first person who adopted oil-gas as a manufacturing speculation was Mr. John Taylor, who obtained a patent for an oil-gas apparatus in 1815, although, from some unforeseen difficulties in the process, he was unable to introduce it with success until 1819.

The principle on which oil-gas is procured affords in its simplicity a remarkable contrast to the complicated processes and elaborate purifications demanded in coal-gas: a small stream of oil is projected into a red-hot retort, partly filled with pieces of coke or brick; it is immediately converted into gas, which passes off through a pipe issuing from another part of the retort, and little more remains to be done than to cool it, and to deposit it in the gasometer. The constant filling and emptying of retorts, the separation of tar and oil, the purification by lime, and consequent dirty processes indispensable in coal-gas, are all avoided; the machinery is of very moderate dimensions and requires comparatively little attendance, and the gas, when made, has a considerably greater illuminating power than that obtained from coal, varying, according to different experiments, from double to quadruple. It would appear from this statement that oil-gas must decidedly obtain a preference over that procured from coal, and that in future no more coal-gas would be made. But there was one advantage possessed by coal over oil, sufficiently important to outweigh all others, namely, the cheapness of the gas it affords, which, after much conflicting evidence, has been finally established. It appears at first that there could be little difficulty in coming to a decision on this point; but there were many circumstances attending the question which rendered it liable to dispute. One was the different illuminating power possessed by the two gases; the oil-gas being admitted by the most strenuous advocates of coal-gas to have the advantage. The difficulty consisted in determining the amount of this superiority; the defenders of oil-gas asserted that a given quantity gave four times as much light as an equal bulk of coal-gas, while the other party declared that the proportion was barely double, and some went so far as to say that there was little difference between the two gases, or at most that the light produced by oil-gas was only a fourth greater than that of coal. Such a discrepancy in a case admitting of direct verification must appear strange, and has been usually set down to the account of wilful misrepresentation. It is probable that prejudice may have swayed the opinions of all parties, but the truth is that oil-gas is very variable in quality; some oils producing a gas of much greater power than others, and the same oil under careful management giving a gas twice the value of what would be procured with less attention: nay, that the very same gas, collected in a gasometer, will be found to vary considerably according to the time when its qualities are experimented upon; being, when fresh made, much better than when it has stood a few days. A careful experiment showed, that, with fresh-made gas, a burner consuming 206 inches per hour gave a light equal to one candle, but that, after five days' standing, 257 inches were requisite to produce the same light. But though all these causes of uncertainty were removed, and the two gases should always be taken at their most favourable state (for coal-gas varies in quality, though not so greatly as oil-gas), there will be still a subject of difficulty in the size of the burner. We have already stated that the greater the light produced from the same burner, the less is the proportion of gas consumed; for example, that an Argand burner consuming three feet of gas per hour gives a light five times as great as it would do when consuming half that quantity of gas. Now in the experiments made to ascertain the powers of coal and oil-gas, equal burners have generally been used; the best gas has consequently been burned at a disadvantage, being brought down to the power of the inferior gas, and the burner therefore consuming much less than its full supply.

When all these circumstances are considered, it will not appear strange that experiments made with perfect good faith might produce very various results; and even now that the matter is much better understood, there is by no means a general consent as to the value of the two gases, though we shall not be wide of the mark if we estimate the illuminating power of oil-gas at double that of coal-gas. The expense of coal-gas,

in an establishment producing 50,000 feet per day, has been estimated at 11s. per 1000 feet, including coal, wages, machinery, and interest of capital, while the same quantity of oil-gas may cost about 35s. To produce the same quantity of light with oil-gas, the expense would therefore be about half as much again as with coal; consequently there can be little hesitation in preferring coal to oil-gas in such cases. But the cost of coal-gas is materially enhanced in smaller establishments,—such as are required in provincial towns, or detached buildings,—while oil-gas may be made nearly as cheap at home, with a little apparatus, as at the largest manufactory. We may finally come to the conclusion, that the small space occupied by the apparatus, the dispensing with at least one-half the capacity of the gasometers, the absence of condensers and purifiers, and the comparative freedom from nauseous smells, will give oil-gas the preference in all cases, except those where the making of gas is a trade conducted on a scale of considerable magnitude.

The mode of making oil-gas may be understood at once by a reference to the annexed figure:—



A B is a retort partly filled with pieces of coke or brick. C is a pipe, which admits oil from the reservoir D into the retort. The oil is constantly dropping into the retort, and as constantly entering the reservoir by the pipe E from the oil-cistern F. As soon as the oil reaches the hot coke or brick, it is decomposed, converted into gas, and sent off through the pipe G, one end of which dips into the oil in the reservoir D, which is always kept filled to the same height. From the reservoir it passes through the pipe H into the gasometer. The object of making the gas pass through the oil is to cause it to deposit any portion of the oil which may have been merely evaporated, or converted into a sort of steam, without being decomposed. This steam becomes oil again, and is ready to pass again into the retort. When the gas is produced rapidly, it is considered useful to pass it through water in order to cool it, but it will generally be cooled enough by the water of the gasometer. This is the whole process. Several additional details are important to the manufacturer, for the more ready carrying off the gas, and the more complete deposition of impurities; but the mode of its production may be seen better by the above figure than by a more complex apparatus. Oil-gas companies have been formed in London, Dublin, and New York, at Hull, Norwich, Taunton, Plymouth, Liverpool, Colchester, and some other towns. The success, as far as brilliancy of light is concerned, has been complete, but how far it has answered as a profitable speculation we are unable to say. At some of these places we are aware that coal has been substituted for oil; possibly the extension of the manufacture may have occasioned the change, from a knowledge of the superior cheapness of coal-gas when obtained on a large scale.

A great deal of excitement at one time existed as to the danger to be apprehended from gas, and two or three accidents happened which for some time delayed the spread of this valuable light; but they were so unimportant, and so few in comparison of the magnitude of the operations, that they might rather be taken as evidence of the little danger of gas. Means were taken to prejudice the public, and calculations were entered into comparing the power of a gasometer full of gas with that of barrels of gunpowder; without noticing that the worst effects of gunpowder arise from its rapid combustion, while gas burns slowly. It is true that when gas is mingled with from five to ten times its volume of air, it will explode with rapidity; but such a mixture could scarcely occur in a gasometer unless purposely made, and then all the calculations would be at fault, from the much smaller quantity of gas which would be contained in the gasometer. A 'Report,' by Sir William Congreve, dwelling very unfairly, in our opinion, on the dangers of coal-gas, gave rise to a parliamentary investigation in 1823. After a fortnight's attentive examination of evidence, the committee came to the conclusion that there was very little cause for apprehension and no necessity for legislative interference. The only danger to the public appears likely to arise from the escape of gas in confined places, such as cellars, cupboards, and enclosed shop-counters, through which a pipe might pass: a flaw in such a pipe might in a few days emit gas enough to form a dangerous mixture, and a candle incautiously introduced might produce an explosion; careful persons will not allow pipes to be laid in such situations, or, if that cannot be dispensed with, they will not bring a candle into them without due precautions. Little danger need be apprehended from an escape into any other place, it having been calculated that a hole of one-twentieth of an inch in diameter, emitting gas at the ordinary pressure into a room of ten feet square, would require two or three days to form an explosive mixture, and not then unless the room were nearly air-tight*.

PARLIAMENT OF EDWARD I.

Pinkerton, in his 'Iconographia Scotica,' published in 1797, gives a curious print of a parliament of Edward I., "taken from a copy, in the collection of the Earl of Buchan, from an ancient limning, formerly in the College of Arms, London." On a throne, at the upper end, sits the king, with his name and arms over his head; and, similarly distinguished by their names and arms, sit Alexander king of Scotland, and Llewellyn prince of Wales, the former on Edward's right hand and the latter on his left, on seats a little less elevated than his own. Beyond king Alexander, but on a lower seat, is placed the Archbishop of Canterbury, while the Archbishop of York is similarly seated near Llewellyn. A woolsack lies crosswise of the House, and on it, in front of the throne, sit four persons, evidently the chancellor and the other chief judges of the courts of law. Two other woolsacks are placed at right angles with the former, and on each of them sit four persons, doubtless intended for the other eight judges. Another woolsack is placed crosswise of the House, on which are seated four persons with their faces towards the throne, with their heads uncovered, and who these are it does not seem easy to determine. Behind these persons, and with their faces also towards the throne, are two persons standing uncovered with something like open papers in their hands, apparently clerks. Behind these clerks there is a cross-bench, on which sit seven persons

* We are indebted for a portion of the details above given to Matthews's 'History of Gas Lighting;' particularly in that part of our sketch which narrates the first adaptation of gas to economical purposes, and its consequent progress.

covered, all with their faces towards the throne, and dressed in gowns or robes; and the right-hand man, who appears to sit somewhat higher than the rest, is attired in a black gown with a chain round his neck. Smith, in his 'Antiquities of Westminster,' is inclined to think that they are the lesser barons, or county representatives, and that the person with the chain is their speaker, whose office at that time seems to have been much the same as that of the foreman of a jury at present, namely, to collect their opinions individually and declare the result collectively in the name of the whole body. Each side of the room contains two benches at right angles with the throne: those on the left have two bishops and five peers on one seat, and seven peers on the other; and at the upper end of the front bench on this side, and on a separate seat placed a little more forward than the bench, sits the prince, the son of King Edward, afterwards Edward II. The mitred abbots are placed on the other or right side of the House, and on the bench nearest the wall; six of them on that bench, and thirteen more on a return which it makes at right angles, so as to come behind the above-mentioned bench containing the seven persons. The other bench on the right side of the House contains six bishops seated just before the six abbots. Some persons, apparently attendants, are also introduced, such as a nobleman uncovered, with a herald, also uncovered, near him, standing behind near Prince Edward. Between the king of Scots and the Archbishop of Canterbury, but farther back than either, and separated from the rest of the house by their seats, stands a man in a gown, but uncovered, with a roll of parchment in his hand. In a similar situation, between prince Llewellyn and the Archbishop of York, appear two persons who, although covered, do not seem to be members of the House, because they are divided from it by the covered bench, on one end of which that prince sits. The floor is chequered, and the seats of the barons, bishops and abbots are plain forms; but that extending across the upper part of the House, and on which the princes and archbishops are seated, is a sort of sofa covered with embroidered cloth, and in that part also the floor is covered with a sort of figured cloth or carpet. In the engraving, it looks as if the centre of the sofa were padded up to support, nearly on a level with the verge of its back, the king's throne, which is a neat canopied chair with piers, surmounted by globes, on each side the seat. The king of Scotland and prince of Wales have crowns but no sceptres; but Edward has a very formidable sceptre, and the archbishops have their crosiers. All the faces are without beards or mustachios, and the execution and perspective are such as might be expected in that age.

The coronation of Edward took place on the 19th of August, 1274. Alexander, with his queen, and many of his nobility, assisted at the ceremony. From the delineation here given, it also appears that Alexander and Llewellyn sat in the House of Peers in a parliament held, as usual, after the inauguration.

It does not seem difficult to determine the rank of the different persons represented in this engraving, with the exceptions already indicated. Pinkerton himself thinks that the uncovered person in the background near King Alexander bears the deed of homage for the lands held by that monarch in England; and that the two covered persons standing behind, near the Archbishop of York, are the pope's ambassadors. The seven persons on the cross bench are, with the exception of the right-hand man, dressed like the barons; and, if we concur with Smith in supposing them the knights of the shires, the four uncovered persons seated before them, on one of the woolsacks which form a quadrangle in the middle of the house, may not improbably be the delegates of the City of London, which appears to have possessed the privilege of sending representatives to the parliament at a period somewhat earlier than any other town in the kingdom.

BARROWS.

THIS name is given to the artificial hills which were in ancient times very generally constructed to commemorate the mighty dead. Such hills are usually formed of earth, but sometimes of heaped stones. In the latter form they are almost exclusively confined to Scotland, and are there called cairns. Barrows are found in almost every country, from America to the steppes of Tartary, and probably exhibit the earliest and assuredly the grandest species of honorary burial; a humble relic of which we still retain in the mounds of earth over the graves in our churchyards. Assuming that the barrow indicates, in the matter of sepulture, the first step of man from the merely savage state; it does not seem to have been forsaken for monuments of greater art and delicacy until such further advances in civilization had been made as might be indicated to a careful inquirer by the alteration in the form or structure of the tumulus itself, and still more by the contents which might be disinterred; for it was in all, except perhaps the very earliest instances, customary to bury with the dead their weapons, their ornaments, and other articles of value. In the barrows of the earliest period we might expect to find no more than the bones of the uncoffined and unurned barbarian with his arrow heads of flint; while those of a later period would furnish stone and earthen coffins, urns of metal and earthenware, spears, swords, shields, bracelets, beads, mirrors, combs, and even coins and cloths,—articles which are actually found in some tumuli; and most of them in those of this country. In general, however, a person pursuing such investigations would be most surprised at the very great resemblance which the barrows of remote countries bear to each other, not only in their structure but in their contents. In exploring the tumuli of distant lands, and comparing our discoveries with those made by other persons in other lands, the writer has been frequently tempted to fancy that they were all, in effect, the work of the same people.

We have felt very strongly the imposing effect produced by the view of vast, open, and forsaken Mohammedan cemeteries at a distance from the existing habitations of men; but even this is nothing to the impression made on the traveller by the cemeteries of the early world, when he stands in Scythian or Tartarian steppes, and sees these artificial hills stretching to a vast distance around. It would be necessary to see them to comprehend the immense labour which must have been employed on their construction. They vary greatly both in height and circumference; but, generally, when one of particularly elevated appearance occurs, there are seen around it other barrows of smaller dimensions. It is reasonably supposed, that while the larger tumuli covered the remains of princes and heroes, the smaller contained the bodies of inferior dignitaries. The common people could not generally have been so expensively interred as even in the smaller tumuli. As this kind of barrow-burial is not in those countries open to notice as an existing usage, it is a particular advantage to be able to recur to Herodotus, who speaks with a special reference to the people whose cemeteries we at present consider, and whose account is confirmed by the discoveries of such travellers as have been able to acquaint themselves with the contents of these burial-hills. He says that when a king or chief died the people assembled in great numbers to celebrate his obsequies. The body was taken to the district particularly appropriated to interments, where a

large quadrangular excavation was made in the earth (in its dimensions more like a hall of banquet than a grave), and within it the body of the deceased prince was placed on a sort of bier. Daggers were laid at various distances around him, and the whole covered with pieces of wood and branches of the willow-tree. In another part of the same immense grave were deposited the remains of one of the late sovereign's concubines, who had been previously strangled; also his favourite servant, his baker, cook, housekeeper, and even his horses,—all followed him to the grave and were laid in the same tomb, together with his most valuable property, and, above all, a sufficient number of gold goblets. This last is a refinement we should hardly have expected to find in the Scythians. Our Saxon ancestors were content to think that they should drink beer in the halls of Odin from the skulls of their enemies. No doubt all this arose from the widely-diffused persuasion among savages and barbarians that the deceased will enjoy in another world the services of the persons and animals, and the use of the weapons and utensils deposited in his grave. After this the hollow was soon filled and surmounted with earth, every person being anxious to do his part in raising the hill by which his departed lord was honoured.

After this statement concerning some of the more ancient barrows, it may not be amiss to notice some discoveries of sepulchres of the same class in countries explored at a comparatively recent date, and which will serve to show the extent to which this mode of burial, perhaps beyond any other, prevailed previously, and for some time subsequently, to a knowledge of architecture. Barrows have been found in New Caledonia, and in the country north of the Hottentots. Two very curious tombs on the barrow-principle were discovered by Mr. Oxley in 1817-1818, in the interior of New South Wales. The principal of the two showed considerable art. The form of the whole was semicircular: three rows of seats formed one-half, and the grave, with an outer row of seats, the other. These seats or benches constituted segments of circles of from forty to fifty feet, and were raised by the soil being trenched up between them. The grave itself was an oblong cone, five feet high by nine in length. This barrow was supported by a sort of wooden arch: the body was wrapped up in a great number of opossum skins, covered with dry grass and leaves, and lay about four feet below the surface.

Barrows, and other similar tumuli, are also found in America, and are thus mentioned in the 'Encyclopædia Americana':—"In the valley of the Mississippi, tumuli, or mounds of earth, are discovered in great numbers, of the origin and uses of which we are yet ignorant. Similar constructions also occur in Mexico. The barrows of the Mississippi valley have been found to contain bones, and are said to be composed of earth different from that of the surrounding country. They exhibit no trace of tools, and are, in fact, merely regular piles of earth, without brick or stone. They are commonly situated in rich plains or prairies. There is one near Wheeling 70 feet in height, 30 or 40 rods in circumference at the base, and 180 feet at the top. There is a numerous group at the Cahokia, stated at about 200 in all, the largest of which is a parallelogram, about 90 feet high, and 800 yards in circuit. It has been asserted that the skulls found in these mounds resemble those of Peru."

These American tumuli are not, like those we have been hitherto considering, the monuments of individuals, but appear to consist of thick strata of bones, promiscuously strewed with alternate layers of earth. The difficulty alluded to in the extract seems to be to determine on what occasion they were constructed. Some consider that they were raised on the scene of memorable battles, and contain the remains of those slain on the occasion—others suppose them to have originated in the custom of collecting, at certain periods, the bones of the dead wherever deposited—and many regard them as the cemeteries of formerly-existing towns. The first conclusion seems strengthened by the fact that the tumuli in Ohio afford skulls fractured by the battle-axe, and bones with the stone heads of arrows sticking in them; the second by the dispersed manner in which the bones are found; and the third by the fact that the sites of towns are indicated by walls and ditches having been found in the vicinity of such barrows. Some curious facts on this subject, are given in a late Number of Silliman's 'American Journal of Science.'

THE OTTER.

The Romans, on their arrival in this island, found the bear, the wolf, the beaver, the wild hog, and wild cattle, besides the stag, the roebuck, the fox, the otter, and many more, all objects of chase, in which the Britons spent a great portion of their time. Of these animals, the bear, the wolf, the wild hog, and the beaver, have long been extirpated. Wild cattle, the descendants of the original native stock, now only exist in one or two parks; so that they may be considered as on the eve of being extinct. The roebuck is very scarce, and the stag (except where preserved in inclosed parks) as much so, —both lingering only in the wild mountain districts of the North. The fox, were it not that the breed is preserved for the gratification of the privileged few to whom its chase affords amusement, would soon disappear.

The otter is one of the most interesting of the indigenous beasts of prey which have a place among the British Fauna of the present day. Voracious, subtle, active, and bold, it is notorious for its devastations among the fish in our rivers and lakes, which are not protected from this foe either by the element in which they live, or by the rapidity of their motions in it. Like them, the otter is at home in the water, swimming at any depth with the utmost velocity and address. It follows up its prey, silently and with indomitable perseverance, through every turn and maze, ever keeping the victim in sight, which, after a chase of greater or shorter duration, is exhausted, captured, and killed. Nor is the otter less remarkable for the graceful elegance than for the vigour of its movements in the water. Whoever has witnessed the feeding of those kept in the Gardens of the Zoological Society cannot fail to have remarked the fine sweep of the body as the animal plunges into the water,—its undulating movements beneath the surface while exploring the prey—the abrupt and arrow-like velocity of the pursuit—and the easy turn to the surface with the captured booty, which is taken to its den and devoured. The animal then returns to the water and takes another fish, which is dealt with in the same manner; and this process is repeated until no more fish are left. Sometimes, however, instead of treating them thus separately, the otter contrives to bring up several at a time, managing not only to seize them with great dexterity, but to carry them hanging from its mouth. Eight or ten fish serve for a single meal; but it is well-known that in a state of freedom an otter slaughters a much larger number of fish than it devours; and thus some idea may be formed of the annual havoc occasioned by a pair of otters in a river or preserve for fish, in order to supply the wants of themselves and their young ones.

It seems a matter of some surprise that an animal far from being destitute of docility, and possessing the instinctive qualifications alluded to, should not be known in a reclaimed condition, so as to be useful to man or subservient to his pleasure. There are, indeed,

several isolated instances on record of its having been domesticated, and so trained as to exert its powers on behalf of its master. Bewick relates that Mr. James Campbell possessed a young one, which had been trained by him with such success to catch fish that, in a single day, it would sometimes take ten salmon. When wearied with its hunt, it would decline further exertion and receive its reward in an ample repast on the fish it had taken, and fell almost instantaneously asleep, being generally conveyed home in that state. It would fish in the sea as well as in rivers. The late Bishop Heber noticed in India, on one occasion, a number of otters tethered by long strings to bamboo stakes on the water's edge, and was informed that it was customary to keep them tame in consequence of their utility in driving the shoals of fish into the nets, as well as of bringing out the larger fish with their teeth. Those which Bishop Heber saw were almost as tame as dogs, and were enjoying themselves, some in swimming about, as far as their strings would admit, —others in rolling and basking on the sunny bank.

The otter is admirably adapted to its aquatic habits. Its body is elongated and flexible, and terminated by a long, robust, but tapering and somewhat compressed tail, which serves as a sort of rudder in the performance of the evolutions of the animal in the water;—the limbs are very short, but remarkably muscular and powerful; and the feet, which consist of five toes each, are webbed so as to serve as paddles or oars. The eyes are large, the ears short, and the lips are furnished with strong mustachios. The covering consists of two kinds of fur,—an under-vest of close, short, water-proof wool, and an outer-vest of long, coarse, glossy hairs. Shy and recluse, the otter is nocturnal in its habits, lurking by day in its burrow, which opens near the water's edge, concealed among intertangled herbage, and is generally carried to a great depth in the bank. Here, on a bed of leaves and grass, the female brings forth and rears her young, attending to their wants with great assiduity, and exhibiting for them a more than ordinary share of maternal solicitude. She produces four or five young at a birth in May or June.

Among the sports of our forefathers, otter-hunting was not one of the least esteemed; and a breed of rough-haired powerful dogs was employed in aiding the exertions of the hunters. As the water is the congenial element of the otter, a single dog has there little chance against so active and resolute an antagonist, nor indeed could any number unassisted bring him to bay. When forced from his retreat, it is in the water, therefore, that the animal naturally takes refuge; here a host of dogs assailing him would oblige him to swim beneath the surface as long as he could hold his breath, and on his rising to breathe he would be met by a shower of spears, launched at him by the hunters on the bank. Thus attacked on every side, still his activity and resolution would, under ordinary circumstances, enable him to baffle for a long time the most vigilant pursuit of his enemies, and not unfrequently to escape. But at length the poor animal perished, as too often happened, wounded and oppressed by numbers, yet fighting to the last. In our day otter-hunting is less commonly practised, as the animal is more scarce as well as more limited in its localities; it is not, however, by any means forgotten. But traps, nooses, &c., are now usually employed in order to rid the pond or river of so destructive a guest.

The following cut is a representation of an otter-hunt in Scotland, of which we shall give a description in a future Number.

[Otter-Hunt in Scotland.]

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